SMOOTHTALKER for SPEAKEASY

Smoothtalker for SPEAKEASY by Personal Peripheral Products is a machine language text to speech translation program. It has been designed using over 400 rules of the English language and will pronounce directly most words. Included in the software are over 2500 exceptions to the rules of English that correct for strange words such as trough and through. Unfortunately, English is a language of exceptions, and you may find that some words, though simple for a human, are impossible for a machine because they just do not follow any rules at all. Examples of this are the words CRAZY or the name RUTH. To assist in this problem, we have included a BASIC language exception dictionary program that you can use to correct words that you use often and can't stand to hear pronounced wrong. When using the dictionary, all you have to do is spell the word correctly - then spell the word like it sounds - and Smoothtalker will then pronounce words as you want them to sound, instead of by the rules.

As an example, RUTH is actually pronounced ROOTH, and CRAZY is pronounced CRAYZIE. A little practice will allow you to say most any word you like OR if you want, to direct SPEAKEASY to say one word when actually it is given another. EDITORS NOTE: (some people may wish to eliminate the ability of SPEAKEASY to say nasty words - if you program the exception dictionary to say POTTY MOUTH in place of *#!$, it will!!).

LOADING SMOOTHTALKER

Smoothtalker is a machine language program which resides in your computer's memory. Properly activated, it is protected from BASIC. Smoothtalker must be loaded from the cassette to the computer using the following procedure:

1. Plug the SPEAKEASY into the Adapter Board
2. Plug in SPEAKEASY and the ADAPTER to your 64
3. Turn on computer and type LOAD "SMOOTHTALKER 64",1,1
4. Type "RUN" (Return)
5. REMEMBER - IF YOU SHUT YOUR COMPUTER OFF - YOU WILL HAVE TO RELOAD SMOOTHTALKER - ALSO type NEW (Return) to return memory to the 64 if you are typing a new program

USING YOUR NEW BASIC COMMAND - SAY

To make it easy for you to use Smoothtalker and SPEAKEASY in your own talking programs, we have redefined one of the BASIC commands within the computer. The command LET is not used very often by programmers since its meaning is UNDERSTOOD by the computer without it being used. LET X = 5 is exactly the same as the statement X = 5. When you load and run the Exception Dictionary, BASIC is altered so that the command LET is replaced by the command SAY.

Do not use LET in any of your speaking programs, it will produce a SYNTAX ERROR, but YOU MAY NOW USE THE COMMAND - SAY. It will work just like a PRINT statement and SPEAKEASY will SAY the words that you include between quotations marks. For example:

10 PRINT "HELLO" is a statement that prints the word HELLO to the screen.

10 SAY "HELLO" is a statement that will say the word HELLO through SPEAKEASY - it is as simple as that !!!

Make sure that the Smoothtalker programs have been loaded properly or else the SAY command will not be understood by your computer. It will let you know by telling you the infamous SYNTAX ERROR.

SPECIAL CASES

TO COPY YOUR CASSETTE PROGRAMS TO DISK:

1. Set up your hardware as if you were using Smoothtalker
2. Type LOAD"SMOOTHTALKER 64",1,1 (Return) - when its done
3. MAKE SURE YOUR DISK DRIVE IS PROPERLY CONNECTED
4. Type SAVE"SMOOTHTALKER 64",8,1 (Return) and it will be transferred.
5. The program WORDS, an example of exceptions may be transferred to disk thru the DICTIONARY 64 menu selection #3

NOTE: THESE PROGRAMS ARE COPYWRITED AND COPIES ARE ONLY TO BE MADE FOR YOUR OWN BACKUP.

TO USE SMOOTHTALKER IN THE DIRECT MODE:

1. Set up hardware
2. LOAD"SMOOTHTALKER 64",1,1
3. Type "RUN" (Return)
4. Use option 6 to exit
5. POKE38640,1
6. SYS38661

Smoothtalker will operate and allow you to type any words. After touching the (Return) key the sentence typed will be said. The F1 key will repeat the last statement. Hitting the RUN/STOP and Restore keys simultaneously will return you to normal BASIC. If you reset, but not turn off your computer, POKE1,54 will enable Smoothtalker and the SAY command.

SPECIAL FEATURES AND TECHNICAL CONSIDERATIONS

1. The SAY command works just like a PRINT statement. It will work with STRING functions and can be SAY'ed to a printer or other device. Try this: After activating Smoothtalker and Quitting the dictionary, type NEW (Return). Now type

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10GETA$:IFA$=""then10
20SAYA$:GOTO10
RUN (Return)
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   You now have a TALKING KEYBOARD!

2. SAY also prints to the screen. If you want invisible speech, just change color within the SAY statement just like you would in a print statement.

3. Smoothtalker works with all memory configurations except the SUPEREXPANDER or any other cartridge that enhances BASIC.

4. If you wish to change the voice of SPEAKEASY, include a < before the word and it will raise one level. A> lowers one level. There are four different levels, but you must keep track of which one you are at. Also, Exception words ONLY TALK at the INFLECTION LEVEL THEY WERE MADE.

5. Individual keys can be made to sound by using the DICTIONARY program. When used in the SAY command, they must be proceded by a space or they may be ignored.

USING THE DICTIONARY

OPTION #1 allows you to LOAD a word list you have previously created. The program WORDS is a supplied list as examples.

OPTION #2 allows you to ADD or DELETE words from your word list, (either the one supplied, or the one you create). When you create words, try inserting a comma to increase long sounds. GOODBY is corrected by spelling it GOOD,BY.

OPTION #3 allows you to SAVE your new word list to TAPE or DISK.

OPTION #4 allows you to LIST the words in your word list.

OPTION #5 allows you to SPEAK words and try them for proper sound. You should use this mode to test words which you want to alter. Type PPP (Return) to get back to the main menu. Then OPTION# 2 will let you modify the word. Return to OPTION# 5 and you can hear the new sound of the word or phrase.

OPTION #6 allows you to QUIT the Dictionary program and return to BASIC. This is the ONLY way you should exit the program. The SAY command will automatically be enabled for you at this time. If you want to now type in a test program, remember to type NEW (Return) or else you will be writing over the Dictionary.

PLEASE! !

To avoid damage to the computer or voice synthesizer, read all of the instructions through before attempting installation. (Throughout these instructions, the word <RETURN> means you are to press the Return key on the C-64 keyboard.)

1. Properly connect the C-64 to the monitor, disk drive and power supply. All units can be plugged in, BUT all power should be off.

2. Attach the adaptor card to the C-64. The adaptor card plugs into the Cartridge port on the rear of the C-64. This is the connector behind the power indication light.

3. Plug the Voice Synthesizer into the adaptor card. The Voice Synthesizer should be positioned so the label is facing the computer and the speaker connector is facing away from the computer.

4. Make sure the switch on the top of the Voice Synthesizer is set to I/O 2.

5. Plug the speaker connector into the Voice Synthesizer. If you have the proper Monitor and cable, it is possible to connect the output of the Voice Synthesizer to the monitor. This will give you control over the volume of the Voice Synthesizer output. Should the voice be distorted when run through the monitor, use the speaker instead.

6. When the power is first turned on to the computer, the Voice Synthesizer will most likely emit a loud sound, be prepared. As soon as the C-64 screen has appeared type the following to quiet the Voice Synthesizer:

POKE 56832,63 <RETURN>

7. Now, turn on the power to the Monitor, the disk drive and the C-64. Be ready, and type POKE 56832,63 <RETURN> as soon as you can, unless you like the weird sound from the Voice Synthesizer!

8. Put the Voice Synthesizer diskette into the disk drive and type:

LOAD "SPEAK.LOAD",8,1 <RETURN>

When the C-64 says READY, type RUN <RETURN>.

9. The computer should 'tell' you it is about to load a program, then the diskette drive light will come on for a couple minutes.

The computer is now loading and will run a program called TALK.LINK, which contains a little demonstration program. The computer gives a short demonstration and lets you type in words or sentences to hear how they sound coming from the C-64. To re-play the demonstration you simply type DEMO <RETURN>, and to quit the program just type QUIT <RETURN>.

The program you load installs a routine hidden in memory that converts words to sounds which are similiar to the way we would pronounce them. The Voice Synthesizer board is only capable of making noises similiar to the ones we humans make, it takes a special program to turn written words into something similiar to speech!

This program uses up some of the C-64's RAM storage space, but allows you to convert words to speech easily. What happens is that the program, when installed, replaces the LET command from BASIC with the SAY command. Once installed, all you have to do in a program or from the keyboard is type:

SAY "HELLO MISTER COMPUTER"

...and the computer will try to speak all that is in the quotes!

If you happen to hit RUN/STOP and RESTORE, the Text to Speech Program will be temporarily turned off and the SAY command will only cause a SYNTAX ERROR message. You can try to re-initiate the resident program by typing:

POKE 1,54 <RETURN>

As with any program which is 'hidden' in the machine, sometimes the C-64 may just lock-up and won't do anything. In such a case, just turn off the power to the C-64 and start over. When you do this, remember the command to quite the Voice Synthesizer!

The diskette contains the SPEAK.LOAD and TALK.LINK programs along with a SMOOTHTALKER program and a PHOMEME editor program. The SMOOTHTALKER program allows you to play with the text to speech conversion program, modifying the way certain words are spoken and adding to the unit's vocabulary. The phoneme editor shows how to send commands directly to the Voice Synthesizer, without using the text to speech converter. If you wish to use any program other than the SPEAK.LOAD and TALK.LINK, make sure the C-64 has been turned off and back on to get rid of any programs hidden in memory or things may not work.

Also, please do not write anything to the Voice Synthesizer diskette. If you build any Dictionaries, please use your own diskettes.

All of the instructions for the equipment are included, have fun and let me know of any monumental discoveries you make!